

(19) 世界知识产权组织
国际局(43) 国际公布日:
2004年4月8日(08.04.2004)

PCT

(10) 国际公布号:
WO 2004/029811 A1

(51) 国际分类号: G06F 12/00
(21) 国际申请号: PCT/CN2003/000823
(22) 国际申请日: 2003年9月26日(26.09.2003)
(25) 申请语言: 中文
(26) 公布语言: 中文
(30) 优先权: 02134847.2 2002年9月26日(26.09.2002) CN

(71) 申请人(对除美国以外的所有指定国): 深圳市朗科科技有限公司(NETAC TECHNOLOGY CO., LTD.) [CN/CN]; 中国广东省深圳市南山高新区高新南一道中国科技开发院孵化大楼六楼, Guangdong 518057 (CN)。

(72) 发明人;及

(75) 发明人/申请人(仅对美国): 邓国顺(DENG, Guoshun) [CN/CN]; 成晓华(CHENG, Xiaohua) [CN/CN]; 向锋(XIANG, Feng) [CN/CN]; 中国广东省深圳市南山高新区高新南一道中国科技开发院孵化大楼六楼, Guangdong 518057 (CN)。

(74) 代理人: 北京英赛嘉华知识产权代理有限公司
(INSIGHT INTELLECTUAL PROPERTY)

LIMITED); 中国北京市海淀区中关村南大街甲27号中扬大厦501室, Beijing 100081 (CN)。

(81) 指定国(国家): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

(84) 指定国(地区): ARIPO专利(GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), 欧亚专利(AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), 欧洲专利(AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI专利(BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

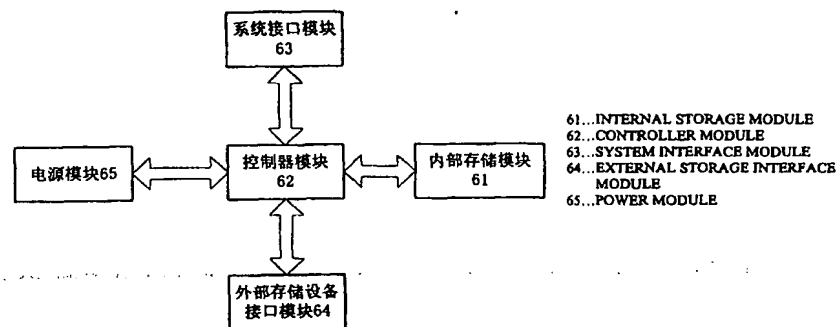
本国际公布:

— 包括国际检索报告。

所引用双字母代码和其它缩写符号, 请参考刊登在每期PCT公报期刊起始的“代码及缩写符号简要说明”。

(54) Title: DEVICE AND METHOD FOR PROVIDING DATA EXCHANGE AND STORAGE

(54) 发明名称: 数据交换及存储装置及其方法



(57) Abstract: The invention relates to a device and method for providing data exchange and storage. The said device includes a controller module (62) which includes a firmware for controlling operation of each modules in the said data exchange and storage device (60) and performing data processing and information exchange; and an internal storage module (61) for storing data under controlling of the said controller module (62); and a system interface (63) module connecting with system interface and performing data exchange with the said data processing system (10) under controlling of the said controller module (62); and an external storage interface module (64) connecting with external storage equipment and performing data exchange with the external storage equipment under controlling of the said controller module (62). The device can accomplish connection with data processing system of various type interfaces and external storage equipment of various type interfaces. The device can also implements function that the data processing system access to the interior storage module and the external storage equipment, thereby the device of invention can be named an individual moveable storage center for users.

[见续页]



(57) 摘要

本发明提供一种数据交换及存储装置及其方法。所述装置包括控制器模块(62)，包含有固化软件，用于控制所述数据交换及存储装置(60)中各模块的操作，和进行数据处理和信息交换；内部存储模块(61)，在所述控制器模块(62)的控制下存储数据；系统接口模块(63)，与数据处理系统(10)连接，并在所述控制器模块(62)的控制下与所述数据处理系统(10)进行数据交换；外部存储设备接口模块(64)，与外部存储设备连接，并在所述控制器模块(62)的控制下与所述外部存储设备进行数据交换。本发明的装置可实现与不同接口类型的数据处理系统和多种不同类型的外部存储设备的连接，还可实现数据处理系统对内部存储模块和外部存储设备的数据存取功能，从而使本发明的装置可以作为用户的个人移动存储中心。

INTERNATIONAL SEARCH REPORT

International application No.

PCT/CN03/00823

A. CLASSIFICATION OF SUBJECT MATTER

G06F12/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

G06F12/00 (IPC7)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
the chinese documents since 1985

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPI, EPODOC, CNPAT, PAJ control+, interface, storag+, IEEE 1394, USB

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	CN2513159Y(abstract, Fig 1 to 4)	1-19
X	CN1367438A(abstract, Fig 1 to 4)	1-19
X	EP1146428 A1(abstract, Page 3 column 33 to Page 4 column 51, Fig 2 and Fig 7)	1-19

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim (S) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

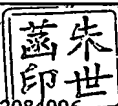
Date of the actual completion of the international search
24.11.03

Date of mailing of the international search report

04 DEC 2003 (04.12.03)

Name and mailing address of the ISA/CN
6 Xitucheng Rd., Jimen Bridge, Haidian District,
100088 Beijing, China
Facsimile No. 86-10-62019451

Authorized officer



Telephone No. 86-10-62084996

Form PCT/ISA/210 (second sheet) (July 1998)

BEST AVAILABLE COPY